

REMARKS

The Amendments

Claim 1 has been amended. The amended Claim 1 is supported by Paragraphs [0014], [0027], [0037] and Claim 25. Claim 25 consequently has been cancelled.

Claims 2 and 3 have been amended. The amended Claims 2 and 3 are supported by the table beginning at page 9.

Claim 19 is amended to delete all trademark names.

Claim 28 has been amended. The amended Claim 28 is supported by Paragraphs [0027], [0037] and Claim 37. Claim 37 consequently has been cancelled.

Claim 41 has been amended. The amended Claim 41 is supported by Paragraphs [0027], [0037] and [0047].

Claims 11, 24 and 31 have been cancelled.

Other amendments are for clarity only.

No new matter is introduced in any of the above amendments.

The Response

1. Election/Restrictions

Applicants have elected Invention Group I, Claims 1-27 and 39. Claims 28-38, 40 and 41 are withdrawn as drawn to non-elected invention.

The Examiner had requested Applicants to elect a single species between “a high dielectric polymer or oligomer” (species A) and “a radically or photochemically graftable polymer” (species B). During the telephone conversation dated April 4, 2006, the undersigned made a provisional election of species A with traverse.

Applicants believe that the Examiner has misunderstood the invention, thus the species election is improper. In original Claim 1, the adhesive or sealing composition comprises a high dielectric polymer or oligomer, a radically or photochemically graftable polymer, and optionally a crosslinking agent. The adhesive or sealing composition must include both (i) high dielectric polymer or oligomer, and (ii) a radically or photochemically graftable polymer. Applicants have amended Claim 1 such that it is clear that (i) and (ii) are both essential elements of the adhesive or sealing composition, and (i) and (ii) are not separable in Claim 1.

Therefore, Applicants request that the Examiner withdraw the species election requirement.

2. Claim Objections

Claims 1-11, 18-27 and 39:

As discussed above, the adhesive or sealing composition in Claim 1 must include both (i) a high dielectric polymer or oligomer having a dielectric constant higher than that of the solvent, and (ii) a radically or photochemically graftable polymer. Claim 1 is supported by Paragraph [0053], which discloses that only part of the polymer or oligomer may be replaced with a radically or photochemically graftable polymer. Therefore, the amendment requested by the Examiner to change ‘and’ to ‘or’ is incorrect because it would change the gist of the claimed invention.

Claims 19 and 24

Claim 19 has been amended to delete trademark names. Claim 24 has been cancelled.

3. Claim Rejections - 35 USC §112, Second Paragraph

Claims 2-3:

Claims 2 and 3 have been amended to add the conditions of dielectric constant.

Claims 11 and 24:

Claims 11 and 24 have been cancelled.

Claim 25-27:

Claim 25 has been canceled. Claim 1 has been amended to recite that a catalyst is optionally present when the crosslinking agent is present, which clarifies the meaning of Claims 26 and 27.

4. Claim Rejections - 35 USC §103

(a) Claims 1-10, 22-27 and 39

Claims 1-10, 22-27 and 39 are rejected under 35 USC 103(a) as allegedly being unpatentable over Liang et al (US 2002/0075556) in view of Takada et al (US 4,985,535) or Engineeringtalk copyright 2000-2006.

Liang et al disclose a display device, in particular an electrophoretic display. Takada et al disclose a moisture-curable adhesive composition. Engineeringtalk discloses thermoplastic polyurethanes.

None of the references discloses or suggests an adhesive or sealing composition which comprises both (i) a polymer or oligomer having a dielectric constant higher than that of the solvent in an electrophoretic fluid and (ii) a radically or photochemically graftable polymer.

Accordingly, the rejection of Claim 1 and its dependent claims, Claims 2-10, 22, 23, 26, 27 and 39, should be withdrawn. Claims 24 and 25 have been cancelled.

(b) Claims 1-10, 22-27 and 39

Claims 1-10, 22-27 and 39 are rejected under 35 USC 103(a) as allegedly being unpatentable over Ikeda (US 6,239,896) in view of Takada et al (US 4,985,535) or Engineeringtalk copyright 2000-2006.

Ikeda discloses an electrophotographic display device. The display device of Ikeda has a layer of an adhesive 11 formed on top of the partitioning wall member 7 for bonding with a second substrate 6 (see Figure 4E and column 8, lines 24-26). Takada et al disclose a moisture-curable adhesive composition. Engineeringtalk discloses thermoplastic polyurethanes.

None of the references discloses or suggests an adhesive or sealing composition which comprises both (i) a polymer or oligomer having a dielectric constant higher than that of the solvent in an electrophoretic fluid and (ii) a radically or photochemically graftable polymer.

Accordingly, the rejection of Claim 1 and its dependent claims, Claims 2-10, 22, 23, 26, 27 and 39, should be withdrawn. Claims 24 and 25 have been cancelled.

(c) Claim 18

Claims 18 is rejected under 35 USC 103(a) as allegedly being unpatentable over the references cited in previous sections as applied to Claim 1 and further in view of Shimizu (US 5,827,926).

Shimizu only discloses a moisture-curable, hot-melt composition. This reference does not disclose or suggest an adhesive or sealing composition which comprises both (i) a polymer or oligomer having a dielectric constant higher than that of the solvent in an electrophoretic fluid and (ii) a radically or photochemically graftable polymer. Therefore it does not cure the deficiency of the references cited in the previous sections, against Claim 1.

Accordingly, the rejection of Claim 18 which is dependent from Claim 1 should be withdrawn.

(d) Claims 19-21

Claims 19-21 rejected under 35 USC 103(a) as allegedly being unpatentable over the references cited in the previous sections as applied to Claim 18, and further in view of "Ansell" (US 4,192,762).

The inventor named in US Patent No. 4,192,762 (cited in the Office Action) is Claiborn L. Osborn, not Ansell. It is assumed that the reference to Ansell is an error.

Osborn (US Patent No. 4,192,762) discloses radiation curable urethane compositions. The reference does not disclose or suggest an adhesive or sealing composition which comprises both (i) a polymer or oligomer having a dielectric constant higher than that of the solvent in an electrophoretic fluid and (ii) a radically or photochemically graftable polymer. Therefore, it does not cure the deficiency of the references cited in the previous sections, against Claim 1.

Accordingly, the rejection of Claim 19-21, which are dependent from Claim 1, should be withdrawn.

5. Provisional Double Patenting Rejection

Claims 1-10, 18, 22-27 and 39 are provisionally rejected as being unpatentable over the pending claims of co-pending application 10/651,540.

Since this is a provisional rejection, Applicants wish to delay the response to this rejection until the claims are otherwise allowable.

6. The Advantages of the Present Invention

Applicants wish to particularly point out the advantages of the present invention, in particular the switching performance of an electrophoretic display, expressed in contrast ratios, as demonstrated in the examples.

In Example 1, the sealing layer was formed from a sealing composition as described in Paragraph [0072] (which is not a composition of the invention) and an electrode layer was laminated over the sealed display cells with an adhesive layer formed from a pressure sensitive adhesive (Paragraph [0073]).

In Examples 11 and 12, the sealing layer was formed from a sealing composition of the present invention. The sealing composition of Example 11 contained (i) a high dielectric polymer or oligomer, polyurethane, and (ii) a graftable polymer, cellulose acetate butyrate (Paragraph [0093]). The sealing composition of Example 12 contained (i) a high dielectric polymer or oligomer, i.e., polyurethane, and (ii) a graftable polymer, i.e., polyvinyl butyrate (Paragraph [0097]).

In Examples 11 and 12, where a sealing layer of the present invention was used, an electrode layer was laminated over the filled and sealed display cells without an adhesive layer (see Paragraphs [0094] and [0098]). In other words, the sealing layer was also capable of serving as an adhesive layer. Furthermore, the electrophoretic display of Examples 11 and 12 showed higher contrast ratios than those of Example 1 (see Table 1 on page 21 and Table 3 on page 25).

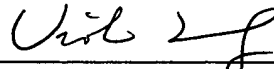
The unexpected advantages as demonstrated provide the inventive step of the present invention.

CONCLUSION

Applicants believe that the application is in good and proper condition for allowance.
Early notification of allowance is earnestly solicited.

Respectfully submitted,

Date: August 17, 2006



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